

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

Title V draft permit No. V-01-003

GULF STATES PAPER CORPORATION

NICHOLASVILLE, KY

April 23, 2003

STUART D. ECTON, REVIEWER, BS CHEMICAL ENGINEERING

Plant I.D. # 21-113-00003

Application Log # G430

SOURCE DESCRIPTION:

Gulf States Paper Corporation manufactures paper cartons primarily for the food industry. The following presses are used to print on the paperboard:

Two Roland 800, 6 Color Offset Presses

One constructed in 1985

One constructed in 1987 with an infrared dryer and aqueous coating unit

Sheeter with flexographic printing capability - sheeter (maximum rated capacity - 18900 lbs/hr) controlled by the building as an enclosure at 70 % efficiency, flexographic ink (maximum rated capacity - 76 lbs/hr), cleanup (maximum rated capacity - 1.5 lbs/hr), natural gas dryers - 2.4 MMBtu/hr maximum rated capacity. Constructed 1998.

Roland 900, 8 Color Offset Printing Press - offset ink (maximum rated capacity -100 lbs/hr), UV inks (maximum rated capacity - 130 lbs/hr), Aqueous coating (maximum rated capacity - 234 lbs/hr), Offset cleanup (maximum rated capacity - 2 gals/hr), Etch (maximum rated capacity -2.5 lbs/hr). Constructed 1998.

Typically, a cornstarch based powder is applied to the cartons to prevent color smearing. The paper board is cut and trimmed and then put through a "jogger-aerator" to remove any extra powder and dust. The paperboard which is now shaped like boxes may be coated with wax, folded, and glued. Cellophane is applied at the Window Machine if a clear glassine area is desired in the box.

The following boilers are used to provide process heat and general building heat:

Cleaver Brooks Model CB293-175A. Rated Capacity 7.323mmBTU/hr. Natural Gas used as the primary fuel and No. 2 Fuel Oil as backup. Constructed 1971.

Superior Model 13-5-1000. Rated Capacity 8.4 mmBTU/hr. Natural Gas used as the primary fuel and No. 2 Fuel Oil as backup. Constructed 1987.

Insignificant Activities:

Bobst CER 140 Cutter

8 Storage Tanks with less than 10,567 capacity containing a petroleum liquid with a vapor pressure of less than 1.5 psia.

Wax Applicator

Scrap Handling

Jogger-Aerator

Platemaking

Parts Washer

Fugitive Emissions

Safety Solvent Cleanup

Four Gluing Lines

Cutting Bulk Material with Ethyl Acetate

COMMENTS:

A field visit by the writer was made in October of 2000. Due to the nature of the process it was deemed unnecessary to require the source to perform method 9 readings in order to show compliance with the opacity limits in regulations 401 KAR 59:010, 401 KAR 59:015, and 61:015. The boilers are small (less than 10mmBTU/hr each) and the particulate matter emitted is not likely to pose a threat to the opacity limits. Therefore the opacity monitoring requirements have been substantially relaxed.

Our efforts should instead be focussed on Gulf States Paper's status as a conditional major for HAPS. Through recordkeeping and reporting requirements in the permit we should be able to accurately monitor the emission of HAP from this source. Gulf States is limited to emitting less than 10 tons per year of any individual HAP and 25 tons per year of total HAP.

Emissions from this source are readily estimated using standard AP-42 emission factors and site specific emission factors developed by Gulf States.

Type of control and efficiency

Other than the limits on VOC content of the inks there is no control for VOC at this facility. PM is controlled and compliance with 59:010 is achieved by cyclones.

Applicable regulations:

Regulation 401 KAR 59:010, New process operations which commenced on or after July 2, 1975.

Regulation 401 KAR 61:015, Existing Indirect Heat Exchangers which commenced construction prior to April 9, 1972.

Regulation 401 KAR 59:015, New indirect heat exchangers which commenced construction after April 9, 1972.

Regulation 401 KAR 59:210, New fabric, vinyl and paper surface coating operations applicable to each affected facility which commenced construction on or after June 24, 1992.

Regulation 401 KAR 59:212, New graphic arts facilities using rotogravure and flexography applicable to each affected facility which commenced construction on or after June 24, 1992.

Regulations not applicable:

401 KAR 61:120, Existing fabric, vinyl and paper surface coating operations

401 KAR 61:122, Existing graphic arts facility using rotogravure and flexography

401 KAR 60:005, Standards of Performance for New Stationary Sources:

40 CFR 60 Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60 Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)

40 CFR 60 Subpart QQ-Standards of Performance for the Graphic Arts Industry:Publication Rotogravure Printing

40 CFR 60 Subpart FFF-Standards of Performance for Flexible Vinyl and Urethane Coating and Printing

401KAR 63:002, National Emissions Standards for Hazardous Air Pollutants:

40 CFR 63 Subpart KK-National Emissions Standards for the Printing and Publishing Industry

40 CFR 63 Subpart QQ-National Emissions Standards for Surface Impoundments

EMISSION AND OPERATING CAPS DESCRIPTION:

Emissions of Hazardous Air Pollutants are limited to less than 10 ton per year
The following are being required to satisfy requirements of 401 KAR 59:010.

PERIODIC MONITORING:

NA

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12. The revisions allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.